

FIG. 1A

[illegible]

FIG. 1B

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p70a.hum...	180	T	G	A	A	A	G	C	A	T	G	G	G	G	A	G	T	T	-	-	-	G	G	A	C	208		
p70b.hum...	192	C	G	G	A	C	G	C	A	T	G	C	C	C	T	T	G	C	C	G	A	G	T	T	G	A	G	224
p70a.hum...	209	C	A	T	A	T	G	A	A	C	T	T	G	G	C	A	T	T	G	T	G	A	G	A	A	T	241	
p70b.hum...	225	C	T	G	G	C	C	T	A	G	A	G	C	C	T	G	T	A	T	G	A	A	G	A	G	G	257	
p70a.hum...	242	T	T	G	A	A	T	C	T	C	A	G	A	A	A	C	T	A	G	T	G	T	G	A	A	C	274	
p70b.hum...	258	T	T	G	A	G	C	T	G	A	C	T	G	A	G	A	C	A	G	T	G	A	A	C	G	T	290	
p70a.hum...	275	C	A	G	A	A	A	A	T	C	A	G	A	C	C	A	G	A	T	G	T	T	T	G	A	G	307	
p70b.hum...	291	C	A	G	A	G	C	A	T	C	G	G	G	C	C	A	C	T	G	C	T	T	T	G	A	G	323	
p70a.hum...	308	T	T	C	G	G	G	T	A	C	T	T	G	G	T	A	A	A	G	G	G	G	C	T	A	T	340	
p70b.hum...	324	T	T	C	G	T	G	T	G	C	T	G	G	C	A	A	G	G	G	G	G	C	T	A	T	G	356	
p70a.hum...	341	T	T	T	T	C	A	A	G	T	A	C	G	A	A	A	A	A	G	T	A	A	C	A	A	T	373	
p70b.hum...	357	T	T	T	T	C	C	A	G	T	G	C	G	A	A	A	A	G	G	T	G	C	A	A	G	C	389	

FIG. 1C

p70a.hum...	374	CTGGG	GAAATAT	T	TGCCATGA	AG	GTGCT	T	AAA	A	406
p70b.hum...	390	TGGG	CAAAATAT	A	TGCCATGA	AA	AGTCT	A	AGGA	A	422
p70a.hum...	407	AGGC	CAATG	AT	AGT	AAATGC	T	AA	AGAT	ACAG	439
p70b.hum...	423	AGGC	CAAAAT	T	TGTGC	CAATGC	CA	AA	GGA	ACAG	455
p70a.hum...	440	CTCA	TACA	AAAG	CA	AGCA	ACGGAA	T	ATTCT	GAGG	472
p70b.hum...	456	CACA	CAACGG	GC	TGA	GCGGAA	CA	ATTCT	AGAG	T	488
p70a.hum...	473	AGT	AAAGCA	T	CCCCT	TCAT	CGTGG	A	TTT	AATT	505
p70b.hum...	489	CAGT	GAAGCA	CCCCT	T	AT	TGTGG	A	ACT	GCC	521
p70a.hum...	506	ATGCC	CTT	TCAG	ACTGG	TGG	AA	A	ACTCT	ACCTCA	538
p70b.hum...	522	ATGCC	CTT	CCAG	ACTGG	TGG	CA	A	A	ACTCTACCTCA	554
p70a.hum...	539	TCC	TTGAGT	AT	CTCAG	TGG	AG	GA	ACT	ATT	571
p70b.hum...	555	TCC	TTGAGT	GC	CTCAG	TGG	T	GG	C	CTT	587

FIG. ID

p70a.hum...	572	TGCAGTT	AGA	AAGAGGGG	ATA	TTT	ATA	TGGAAG	604
p70b.hum...	588	CGCATCT	GGA	GCGAGAGGG	CAT	CTT	CTT	TGGAAG	620
p70a.hum...	605	ACAC	TGCCCTGCTT	TAC	TGGC	AGA	ATC	TCCA	637
p70b.hum...	621	ATAC	GGCCTGCTT	CAC	TGGC	TGA	ATC	ACGC	653
p70a.hum...	638	TGGC	TTTGGGG	GCAT	TTT	ACA	TCAA	AGGG	670
p70b.hum...	654	TGGC	CCCTGGGG	CCAT	CTC	CACT	CCCA	AGGC	686
p70a.hum...	671	TCTAC	AGAGACCT	GAG	AGCC	GAG	ATA	TATC	703
p70b.hum...	687	TCTAC	CGGAGACCT	CA	AGCC	CGAG	ATA	TATC	719
p70a.hum...	704	TTA	ATCACC	AGGT	CA	TGT	GA	AACT	736
p70b.hum...	720	TCA	AGCAGC	AGGG	CCCA	CA	TCA	AACT	752
p70a.hum...	737	TTGG	ACTA	TGCA	AA	GA	TCT	AT	769
p70b.hum...	753	TTGG	ACTC	TGCA	AA	GA	GTCT	AT	785

FIG. 1E

p70a.hum...	770	C	A	G	T	C	A	C	A	C	A	T	T	T	T	G	T	G	A	A	T	A	G	A	T	802							
p70b.hum...	786	C	C	G	T	C	A	C	T	C	A	C	C	T	T	C	T	G	C	G	C	A	T	T	G	A	G	T	818				
p70a.hum...	803	A	C	A	T	G	G	C	C	C	T	G	A	A	T	C	T	T	G	A	T	G	A	A	G	T	G	G	C	835			
p70b.hum...	819	A	C	A	T	G	G	C	C	C	T	G	A	A	T	T	C	T	G	T	G	C	A	G	T	G	G	C	C	851			
p70a.hum...	836	A	C	A	A	T	C	G	T	G	C	T	G	T	G	G	A	T	T	T	G	G	T	G	G	G	A	G	5/30	868			
p70b.hum...	852	A	C	A	A	C	C	G	G	C	T	G	T	G	T	G	G	A	C	T	G	G	T	G	G	G	G	884					
p70a.hum...	869	C	A	T	T	A	A	T	G	T	A	T	G	A	C	A	T	G	C	T	G	A	C	T	G	G	A	C	C	C	901		
p70b.hum...	885	C	C	C	T	G	A	T	G	T	A	C	G	A	C	A	T	G	C	T	C	A	C	T	G	G	A	T	C	G	C	C	917
p70a.hum...	902	C	A	T	T	C	A	C	T	G	G	G	A	G	A	A	T	A	G	A	A	A	A	C	A	T	T	G	934				
p70b.hum...	918	C	C	T	T	T	A	C	C	G	C	A	G	A	A	C	C	G	G	A	A	A	A	A	C	A	T	G	G	950			
p70a.hum...	935	A	C	A	A	A	T	C	C	T	C	A	A	A	T	G	T	A	A	A	C	T	C	A	A	T	T	T	G	C	C	T	967
p70b.hum...	951	A	T	A	A	G	A	T	C	A	T	C	A	G	G	G	C	A	A	G	C	T	G	G	C	A	C	T	G	C	C	C	983

FIG. 1F

p70a.hum...	968	CCTACCTCACAC	CAAGAA	AGCCAG	AGATCT	GCTTA	1000
p70b.hum...	984	CCTACCTCACCC	CAGATT	GCCCG	AGGACCT	TGTTCA	1016
p70a.hum...	1001	AAAGCTG	CTGAA	AAAG	ATGCT	TCTCGTC	1033
p70b.hum...	1017	AAAGTTT	CTGAA	ACGG	AAATCC	CAGCCAGCGGA	1049
p70a.hum...	1034	TGGAGG	AGCTGG	TCC	TGGGGA	CGCTGGA	1066
p70b.hum...	1050	TGGGG	TGGCTGG	CCCA	GGGGA	TGCTGATGTC	1082
p70a.hum...	1067	AGCTCATCC	ATTCT	TTT	TAGACACAT	TAACTGGG	1099
p70b.hum...	1083	AGAGACATCC	CTTT	TTT	CCGACACAT	GAAATGGG	1115
p70a.hum...	1100	AGAACCTTCTGGC	TCGAA	AGGTGG	AGCCCCCT		1132
p70b.hum...	1116	ACGACCTTCTGGC	CTGCG	GTGG	AGCCCCCT		1148
p70a.hum...	1133	TTAACCTCTGT	TGCA	ATCT	GAGG	ATGTAA	1165
p70b.hum...	1149	TCAAGGCCCTGTCT	TGCA	GTCA	GAGG	AGTGA	1181

FIG. 1G

p70a.hum...	1166	G	T	C	A	G	T	T	T	G	A	T	T	C	C	A	A	G	T	T	T	C	A	C	G	T	C	A	G	A	C	1198				
p70b.hum...	1182	G	C	C	A	G	T	T	T	G	A	T	A	C	C	C	G	C	T	T	C	A	C	A	C	G	G	C	A	G	A	C	1214			
p70a.hum...	1199	C	T	G	T	C	G	A	C	A	G	C	C	C	A	G	A	T	G	A	C	T	C	A	A	C	T	C	T	C	A	G	T	G	1231	
p70b.hum...	1215	C	G	G	T	G	A	C	A	G	T	C	C	T	G	A	T	G	A	C	A	C	A	G	C	C	C	T	C	A	G	C	G	1247		
p70a.hum...	1232	A	A	A	G	T	G	C	C	A	A	T	C	A	G	G	T	C	T	T	T	C	T	G	G	G	T	T	T	A	C	A	T	1264		
p70b.hum...	1248	A	G	A	G	T	G	C	C	A	A	C	C	A	G	G	C	C	T	T	C	C	T	G	G	G	C	T	T	C	A	C	A	T	1280	
p70a.hum...	1265	A	T	G	T	G	G	C	T	C	C	A	T	C	T	G	T	A	C	T	T	G	A	A	A	G	T	G	T	G	A	A	A	G	1297	
p70b.hum...	1281	A	C	G	T	G	G	C	G	C	C	G	T	C	T	G	T	C	C	T	G	G	A	C	A	G	C	A	T	T	C	A	A	G	G	1313
p70a.hum...	1298	A	A	A	A	G	T	T	T	T	C	C	C	T	T	T	G	A	A	C	C	A	A	A	A	T	C	C	G	A	T	C	A	C	1330	
p70b.hum...	1314	A	G	G	G	C	T	T	C	T	C	T	T	C	C	A	G	C	C	A	A	G	C	T	G	C	G	C	T	C	A	C	1346			
p70a.hum...	1331	C	T	C	G	A	A	G	A	T	T	T	A	T	T	G	G	C	A	G	C	C	C	A	C	G	A	A	C	A	C	C	T	G	1363	
p70b.hum...	1347	C	C	A	G	G	C	C	T	C	A	A	C	A	G	T	A	G	C	C	C	C	C	C	C	C	G	G	T	C	C	C	C	G	1379	

7/30

FIG. 1H

p70a.hum...	1364	T	C	A	G	C	C	C	C	A	G	T	T	C	T	C	C	T	-	-	-	G	G	G	A	T	1392							
p70b.hum...	1380	T	C	A	G	C	C	C	C	T	C	A	A	G	T	T	C	C	T	T	T	G	A	G	G	G	T	1412						
p70a.hum...	1393	T	T	C	T	G	G	G	A	A	G	A	G	T	G	C	T	T	C	G	G	C	C	A	G	C	A	1425						
p70b.hum...	1413	T	T	C	G	G	C	C	A	G	C	C	C	A	G	C	C	T	G	C	C	G	G	A	G	C	C	G	1445					
p70a.hum...	1426	A	A	T	C	C	T	C	A	G	A	C	A	C	T	G	T	G	G	A	A	T	A	C	C	A	T	G	G	A	1458			
p70b.hum...	1446	A	G	C	T	A	C	C	T	C	T	A	C	C	T	C	C	A	C	T	C	C	T	G	C	C	A	C	C	G	1478			
p70a.hum...	1459	A	C	A	A	G	T	G	G	C	A	T	A	G	A	G	C	A	G	A	T	G	G	A	T	G	A	C	A	A	T	1491		
p70b.hum...	1479	C	G	C	C	T	C	G	A	C	C	A	C	C	G	C	C	C	T	C	T	C	C	C	A	T	C	C	G	T	C	1511		
p70a.hum...	1492	A	G	T	G	G	G	G	A	A	G	C	A	T	C	G	G	C	A	C	C	A	C	T	T	C	C	A	A	T	A	C	1524	
p70b.hum...	1512	C	C	C	C	T	C	A	G	G	G	A	-	-	-	C	C	A	A	G	A	A	G	T	C	C	A	A	G	A	G	G	1541	
p70a.hum...	1525	C	A	G	C	C	G	A	A	C	T	C	T	G	G	G	C	C	A	T	A	C	A	A	A	A	A	C	A	A	G	C	T	1557
p70b.hum...	1542	G	C	C	G	T	G	G	C	G	T	C	C	A	G	G	G	C	G	C	T	A	G	G	A	A	G	C	C	G	G	T	1574	

FIG. 11

p70a.hum... 1558	T T T C C C A T G A T C T C C A A A C G G C C A G A G C A C C T G	1590
p70b.hum... 1575	G G G G G T G A G G G T A G C C C T T G A G C C C T G T C C C T G	1607
p70a.hum... 1591	C G T A T G A A T C T A T G A C A G C A A T G C T T T T A A T	1623
p70b.hum... 1608	C G G C T G T G A G A G C A G C A G G A C C C T G G G C C A G T T	1640
p70a.hum... 1624	G A T T T A A G G C A A A A G G T G G A G A G G G A G A T G T	1656
p70b.hum... 1641	C C A G A G A C C T G G G G T G T G T C T G G G G T G G G T	1673
p70a.hum... 1657	G T G A G C A T C C T G C A A G G T G A A A C A A G A C T C A A A	1689
p70b.hum... 1674	G T G A G T G C G T A T G A A A G T G T G T G T C T G C T G G G G	1706
p70a.hum... 1690	A T G A C A G T T T C A G A G A G T C A A T G T C A T T A C A T A	1722
p70b.hum... 1707	C A G - C T G T G C C C C T G A A T C A T G G G C A C G G A G G G	1738
p70a.hum... 1723	G A A C A C T T C G G A C A C - - A G G A A A A T A A A C G T G	1753
p70b.hum... 1739	C C G C C C G C C A C A C C C G C T C A A C T G C T C C C G	1771

FIG. 1J

p70a.hum... 1754	GATTTT	AA	AA	AA	TCAA	TC	AA	TG	GC	AAAA	AAA	1786			
p70b.hum... 1772	TGGAAG	ATT	AAA	GGGCT	GA	AT	CA	TGA	AAAA	AAA	1804				
p70a.hum... 1787	AACTT	AA	AA	GC	AA	AA	TAG	TATT	GCT	GAA	CTCT	TA	1819		
p70b.hum... 1805	AAAA	AAAA	AAAA										1816		
p70a.hum... 1820	GGCAC	ATCA	ATT	AA	TTG	ATT	CC	TG	CG	GAC	ATCT	1852			
p70a.hum... 1853	TTCTC	AA	CC	TT	AT	CA	AG	GAT	TTT	CA	TG	TTG	ATG	1885	
p70a.hum... 1886	ACTCG	AA	AA	CT	GAC	AG	TAT	T	AAG	GGT	AGG	ATG	TT	1918	
p70a.hum... 1919	GCTCT	GAA	TCA	CT	G	TG	AG	TCT	GAT	GT	G	A	G	A	1951

ART. NO.	FIG.
DRAFTSMAN	CLASS

FIG. 1K

p70a.hum... 1952 AGGGTATCCCTTTTCATTAGGCAAGTACAAATTGCTGC 1984

p70a.hum... 1985 CTATAATACTTGCAACTAAGGACAAATTAGCAT 2017

p70a.hum... 2018 GCAAGCTTGGTCAAACTTTTCCAGGCAAAATG 2050

p70a.hum... 2051 GGAAAGGC AAAGACAAAGAAACTTACCAATTGA 2083

p70a.hum... 2084 TGT TTTTACGTGCAAAACAACCTGAATCTTTT TTT 2116

p70a.hum... 2117 TATATAAATATATATTTTTCAAATAGATTTT TTTG 2149

AT 1009	1009
11	11
DRAFTSMAN	CLASS

FIG. 1L

p70a.hum... 2150 ATTCAGCTCATTATGAAAAACATCCCAACTTT 2182

p70a.hum... 2183 AAAATGCGAAATTATTGGTTGGTGTGAAGAAAG 2215

p70a.hum... 2216 CCAGACAACCTTCTGTCTTCTCTCTTGGTGAAAT 2248 12/30

p70a.hum... 2249 AATAAATGCAAATGAATCATTTGTTAACACAGC 2281

p70a.hum... 2282 TGTGGCTCGTTTGAGGGATTGGGGTGGACCTGG 2314

p70a.hum... 2315 GGTTTATTTTCAGTAACCCAGCTGCGGAGCCT 2346

FIG. 2A-1

p70a.Prot.t...	1	M	R	R	R	R	R	D	G	F	Y	P	A	P	D	F	R	H	R	E	A	E	D	M	A	G	V	F	D	I	D	L	D	33	
p70b.Prot.t...	1	-	-	-	-	-	-	-	-	-	-	M	A	R	G	R	R	A	R	G	A	A	M	A	V	F	D	L	D	L	E	E	23		
p70a.Prot.t...	34	Q	P	E	D	A	G	S	E	D	E	L	E	E	G	G	Q	L	N	E	S	M	D	H	G	G	V	G	P	Y	E	L	G	M	66
p70b.Prot.t...	24	T	E	E	G	S	E	G	E	P	E	L	S	P	A	D	A	C	P	L	A	E	L	R	A	A	G	L	E	-	P	V	55		
p70a.Prot.t...	67	E	H	C	E	K	F	E	I	S	E	T	S	V	N	R	G	P	E	K	I	R	P	E	C	F	E	L	L	R	V	L	G	K	99
p70b.Prot.t...	56	G	H	Y	E	E	V	E	L	T	E	T	S	V	N	V	G	P	E	R	I	G	P	H	C	F	E	L	L	R	V	L	G	K	88
p70a.Prot.t...	100	G	G	Y	G	K	V	F	Q	V	R	K	V	T	G	A	N	T	G	K	I	F	A	M	K	V	L	K	K	A	M	I	V	R	132
p70b.Prot.t...	89	G	G	Y	G	K	V	F	Q	V	R	K	V	Q	G	T	N	L	G	K	I	Y	A	M	K	V	L	R	K	A	K	I	V	R	121
p70a.Prot.t...	133	N	A	K	D	T	A	H	T	K	A	E	R	N	I	L	E	E	V	K	H	P	F	I	V	D	L	I	Y	A	F	Q	T	G	165
p70b.Prot.t...	122	N	A	K	D	T	A	H	T	R	A	E	R	N	I	L	E	S	V	K	H	P	F	I	V	E	L	A	Y	A	F	Q	T	G	154
p70a.Prot.t...	166	G	K	L	Y	L	I	L	E	Y	L	S	G	G	E	L	F	M	Q	L	E	R	E	G	I	F	M	E	D	T	A	C	F	Y	198
p70b.Prot.t...	155	G	K	L	Y	L	I	L	E	C	L	S	G	G	E	L	F	T	H	L	E	R	E	G	I	F	L	E	D	T	A	C	F	Y	187

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FIG. 2A-2

p70a.Prot.t...	199	L A E I S M A L G H L H Q K G I I Y R D L K P E N I M L N H Q G H	231
p70b.Prot.t...	188	L A E I T L A L G H L H S Q G I I Y R D L K P E N I M L S S Q G H	220
p70a.Prot.t...	232	V K L T D F G L C K E S I H D G T V T H T F C G T I E Y M A P E I	264
p70b.Prot.t...	221	I K L T D F G L C K E S I H E G A V T H T F C G T I E Y M A P E I	253
p70a.Prot.t...	265	L M R S G H N R A V D W W S L G A L M Y D M L T G A P P F T G E N	297
p70b.Prot.t...	254	L V R S G H N R A V D W W S L G A L M Y D M L T G S P P F T A E N	286
p70a.Prot.t...	298	R K K T I D K I L K C K L N L P P Y L T Q E A R D L L K K L L K R	330
p70b.Prot.t...	287	R K K T M D K I I R G K L A L P P Y L T P D A R D L V K K F L K R	319
p70a.Prot.t...	331	N A A S R L G A G P G D A G E V Q A H P F F R H I N W E E L L A R	363
p70b.Prot.t...	320	N P S Q R I G G G P G D A A D V Q R H P F F R H M N W D D L L A W	352
p70a.Prot.t...	364	K V E R P F F K P L L Q S E E D V S Q F D S K F T R Q T P V D S P D	396
p70b.Prot.t...	353	R V D P P F R P C L Q S E E D V S Q F D T R F T R Q T P V D S P D	385

FIG. 2A-3

p70a.Prot.t...	397	D	S	T	L	S	E	S	A	N	Q	V	F	L	G	F	T	Y	V	A	P	S	V	L	E	S	V	K	E	K	F	S	F	E	429
p70b.Prot.t...	386	D	T	A	L	S	E	S	A	N	Q	A	F	L	G	F	T	Y	V	A	P	S	V	L	D	S	I	K	E	G	F	S	F	Q	418
p70a.Prot.t...	430	P	K	I	R	S	P	R	R	F	I	G	S	P	R	T	P	V	S	P	V	K	F	S	P	G	D	F	W	G	R	G	A	S	462
p70b.Prot.t...	419	P	K	L	R	S	P	R	R	L	N	S	S	P	R	V	P	V	S	P	L	K	F	S	P	-	-	F	E	G	F	R	P	S	449
p70a.Prot.t...	463	A	S	T	A	N	P	Q	T	P	V	E	Y	P	M	E	T	S	G	I	E	Q	M	D	V	T	T	S	G	E	A	S	A	P	495
p70b.Prot.t...	450	P	S	-	L	-	P	E	-	P	T	E	L	P	L	-	P	P	-	L	-	L	P	P	P	P	P	P	P	P	P	P	P	P	474
p70a.Prot.t...	496	L	P	I	R	Q	P	N	S	G	P	Y	K	K	Q	A	F	P	M	I	S	K	R	P	E	H	L	R	M	N	L				525
p70b.Prot.t...	475	L	P	I	R	P	P	S	G	T	K	K	S	K	R	G	R	G	R	P	G	R													495

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FIG. 2B

SEQUENCE IDENTITY BETWEEN p70 α AND p70 β ISOFORMS

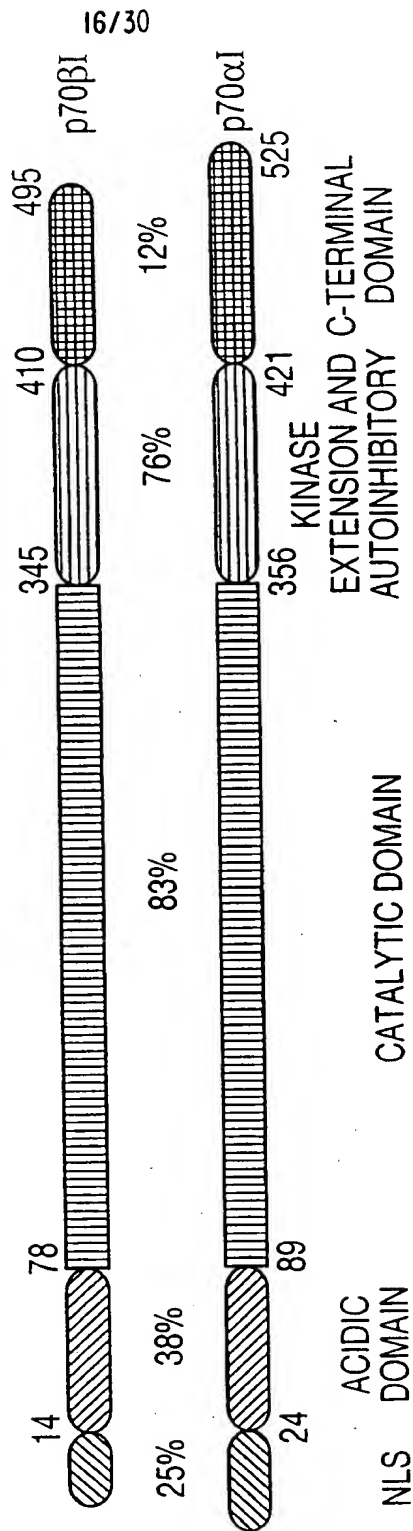


FIG.	1
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PCT/US99/17595

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FIG. 3A

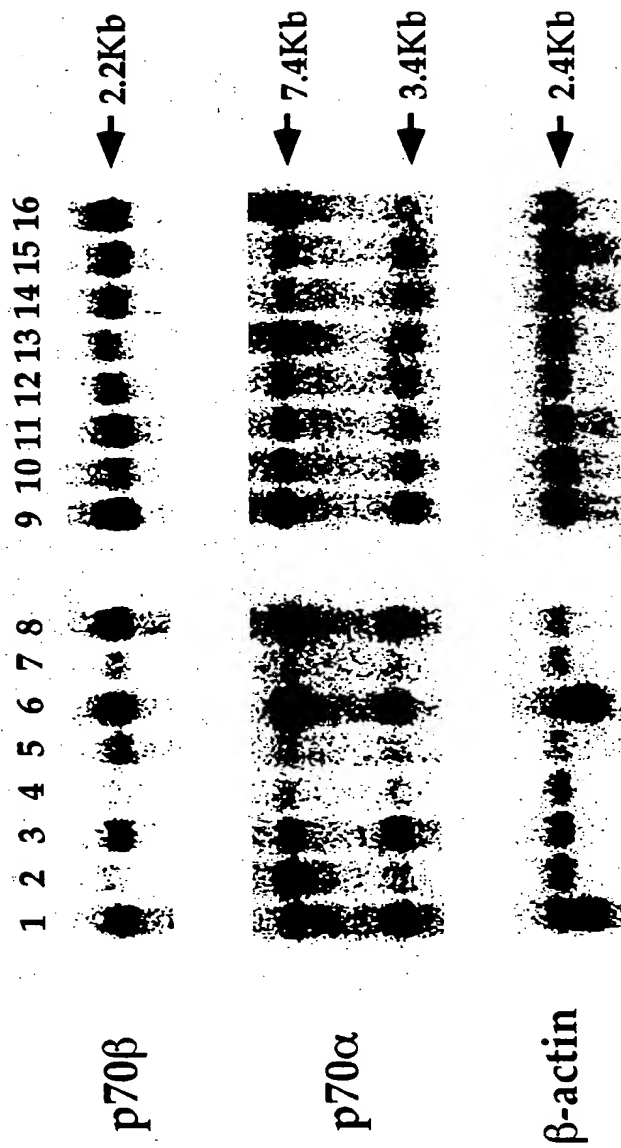
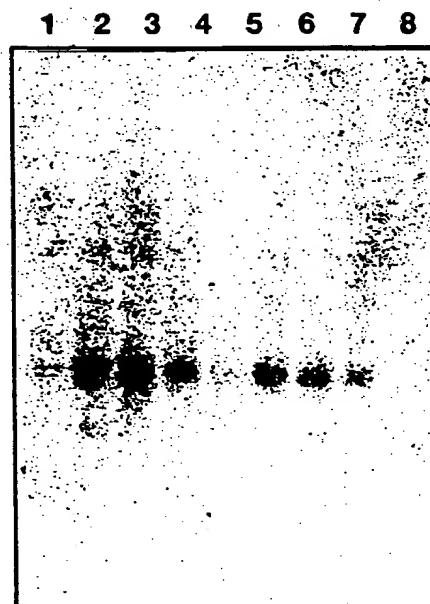


FIG. 3B**Expression pattern of the p70 β mRNAs in tumour cell lines**

- 1 Promyelocytic leukemia HL-60
- 2 HeLa cell S3
- 3 chronic myelogenous leukemia K562
- 4 Lymphoblastic leukemia MOLT-4
- 5 Burkitt's lymphoma Raji
- 6 colorectal adenocarcinoma SW480
- 7 Lung carcinoma A549
- 8 Melanoma G361

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FIG. 4A

FIG. 4A

1 2 3 4 5 6 7

Autoradiography

← S6-P

-	-	I	-	I	S	T
-	-	α			β	

1 2 3 4 5 6 7

anti-Flag blot

← p70 α
← p70 β

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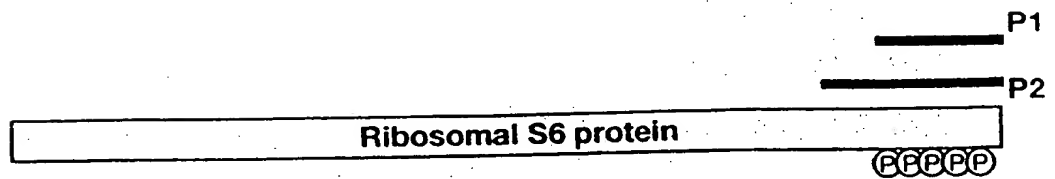
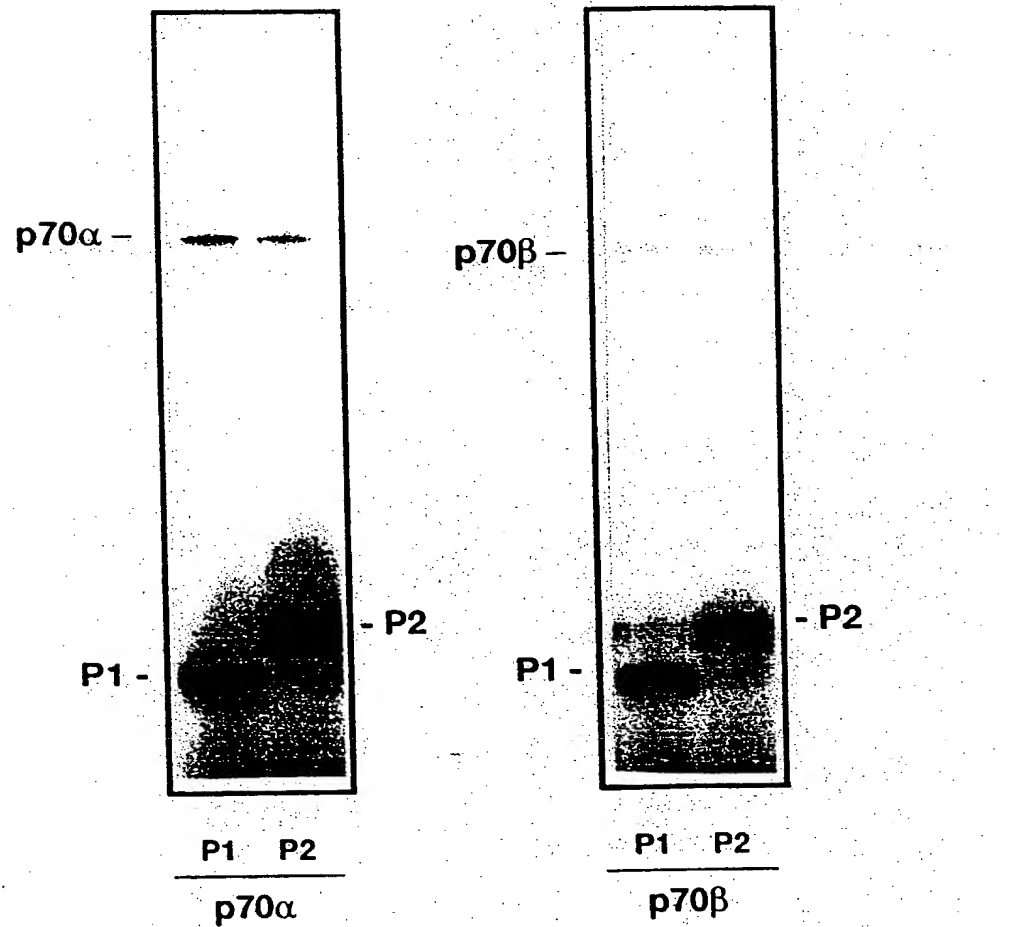
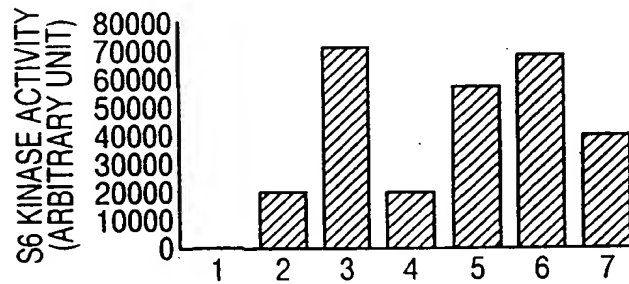
FIG. 4B**PHOSPHORYLATION OF THE RIBOSOMAL S6 PROTEIN
C-TERMINAL PEPTIDES BY p70 α AND β KINASES**

FIG.	SUBCLASS
BY	DRAFTSMAN

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FIG. 5A

ACTIVATION OF THE P70 α AND β KINASES IN
RESPONSE TO VARIOUS STIMULI IN VIVO



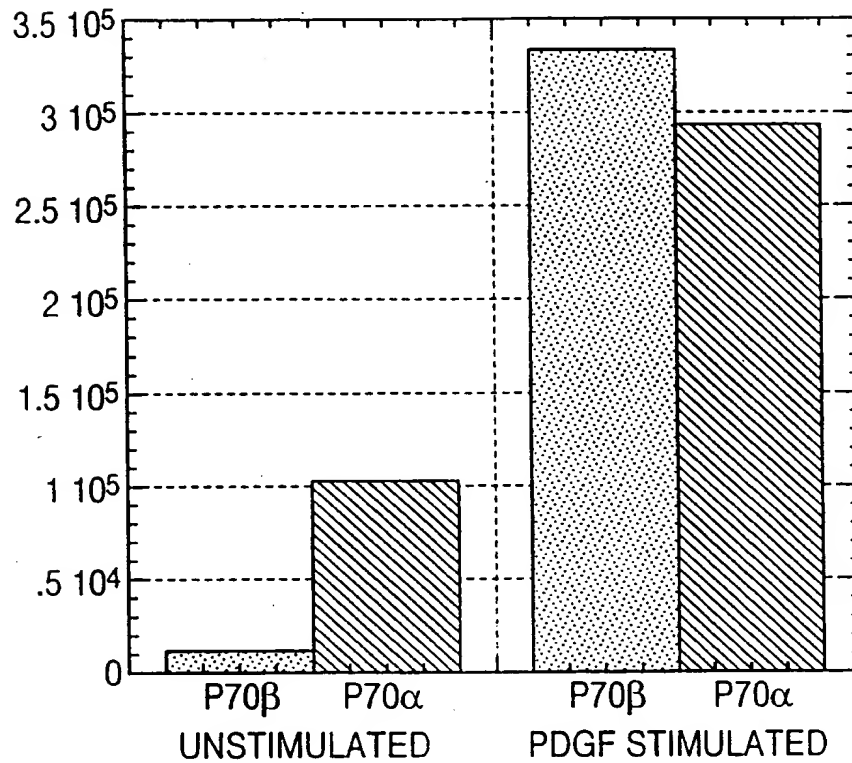
- 1 MOCK TRANSFECTION
- 2 p70 α (STARVED AND NONTREATED)
- 3 p70 α (STARVED AND INSULIN STIMULATED)
- 4 p70 β (STARVED AND NONTREATED)
- 5 p70 β (STARVED AND INSULIN STIMULATED)
- 6 p70 β (STARVED AND SERUM STIMULATED)
- 7 p70 β (STARVED AND TPA STIMULATED)

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FIG. 5B

ACTIVATION OF THE P70 α AND β KINASES BY PDGF IN
TRANSIENTLY TRANSFECTED PAE CELLS



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FIG. 6A

FIG. 6A

1 2 3 4 5 6 7 8 9 10 11



Autoradiography

← S6-P



Rapamycin (nM)	0	0.2	2	20	200	0	0	0	0	0	0
Wortmannin(nM)	0	0	0	0	0	0	1	10	100	1000	0

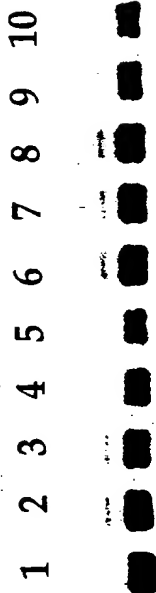
1 2 3 4 5 6 7 8 9 10 11

anti-Flag blot



← p70 α

FIG. 6B



Autoradiography



Rapamycin (nM)	0	0.2	2	20	200	0	0	0	0	0
Wortmannin(nM)	0	0	0	0	0	0	1	10	100	1000



anti-Flag blot



FIG. 6B

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FIG. 7

**INTERACTION OF P70S6K β WITH
DIFFERENT GST/SH3 FUSION
PROTEINS IN VITRO**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

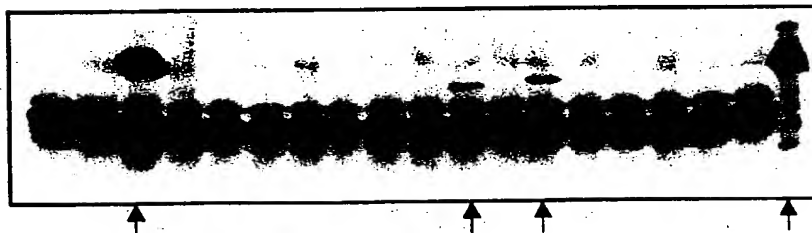
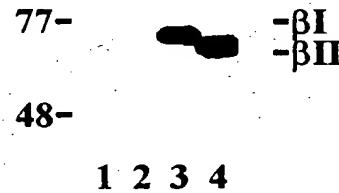


FIG. 8**IMMUNOPRECIPITATION AND WESTERN BLOT ANALYSIS
OF P70 β I AND β II TRANSIENTLY OVEREXPRESSED
IN HEK 293 CELLS****Anti-p70 β
immunoprecipitation****Anti-p70 β
immunoprecipitation****Anti-p70 β
immunoblot****Anti-Flag
immunoblot**

- 1-mock transfection
2-Flag-p70 α I
3-Flag-p70 β I
4-Flag-p70 β II

FIG. 9 A MODEL FOR THE ACTIVATION OF THE p70S6 KINASE

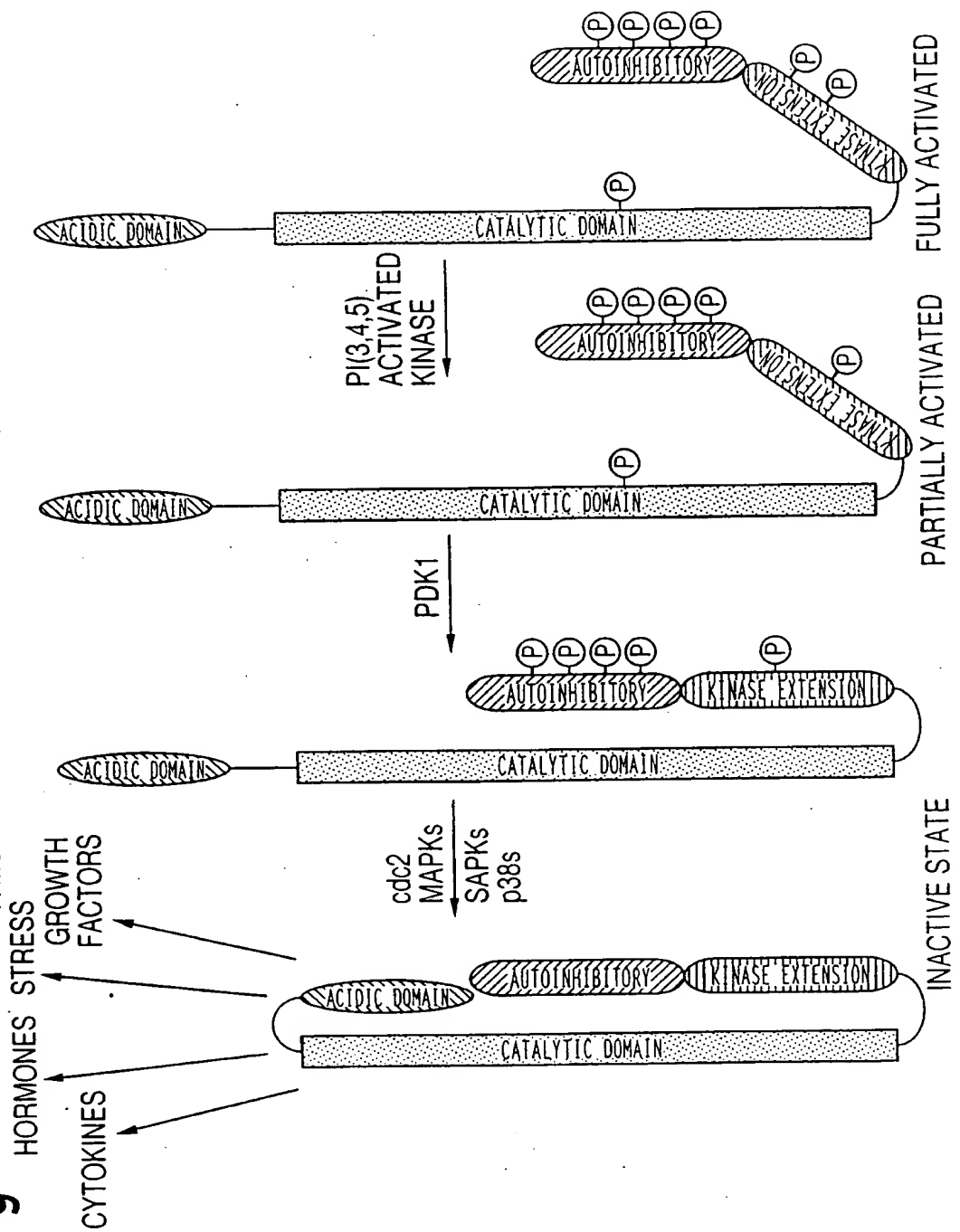
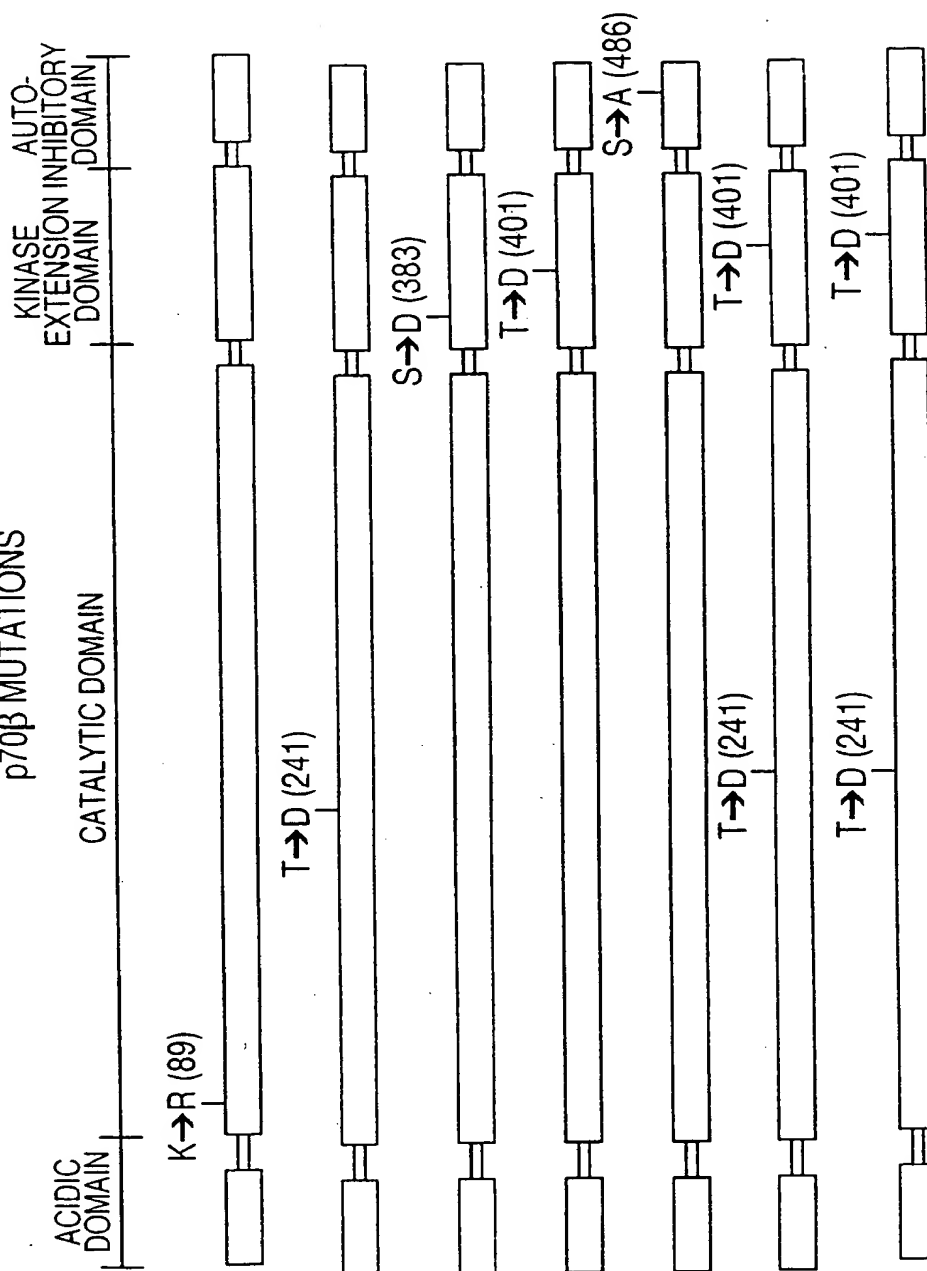


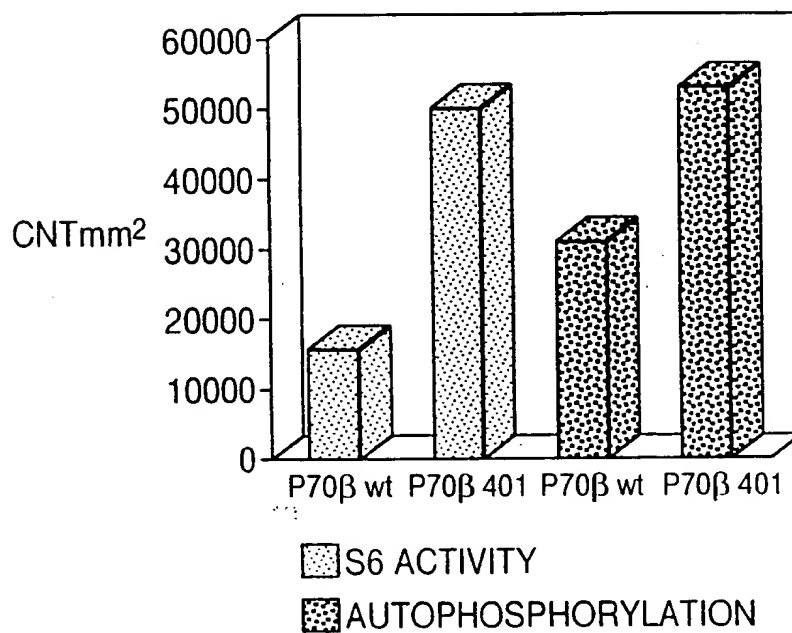
FIG. 10

p70β MUTATIONS





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FIG. 11COMPARISON BETWEEN THE ACTIVITY
OF P70 β WT AND P70 β 401

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

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FIG. 12

COMPARISON BETWEEN THE ACTIVITY OF P70 α WT AND P70 α 412

